

March 2026

# Beekeeping, Honey, and Health

NE KANSAS BEEKEEPERS  
ASSOCIATION-MARCH 26, 2026

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FAAP



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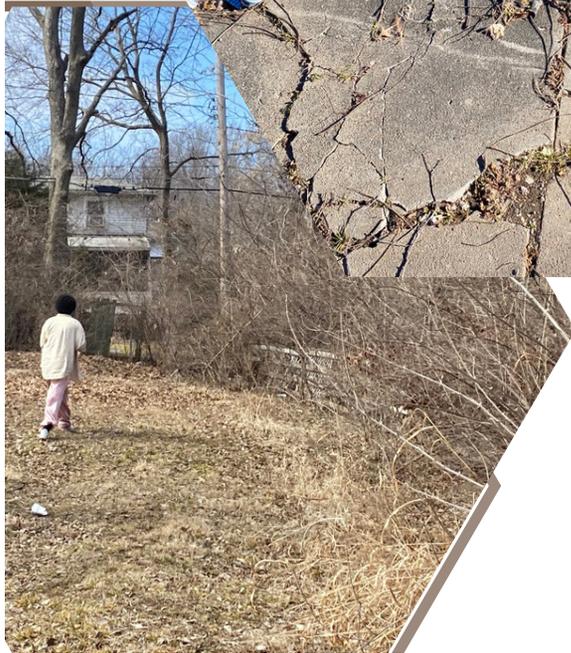
# The Moment That Started It

- 6 vacant lots in Kansas City
- A Broken fence, weeds and scattered trash
- Clover in bloom

• **Question: What if these lots became a honeybee farm?**

## A New Way to See Cities

- Vacant land → Living ecosystems
- Urban lots can become:
  - *Pollinator habitat*
  - *Honeybee farms*
  - *Community learning spaces*
  - *Neighborhood gathering places*



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# MO Hives

## Mission & Our 'HIVE FIVE'

01. Pollinator Conservation
02. Beautification
03. Food Security/Urban Ag
04. STEM Exposure
05. Entrepreneurship

MO Hives KC puts bee hives on vacant urban lots, creating bee farms that pollinate nearby food gardens, while invigorating the community with a wide range of experiential learning opportunities.



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# What Happens on an Urban Bee Farm

## Why Urban Beekeeping Matters

### Cities can provide:

- Diverse flowering plants
- Reduced agricultural pesticide exposure
- Public engagement with conservation habitat where people live

### Community benefits:

- Children see bees and pollinators up close
- Families learn where food comes from
- Neighbors work together
- Cities reconnect with nature

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# Honey has been used medicinally for over 4,000 years

Ancient civilizations with documentation of their usage of honey as medicine:

## EGYPT

- Among the earliest organized beekeepers
- Clay tube hives- Still used in some countries today
- Nile River migratory beekeeping
- Honey used for medicine and preservation

## GREECE

Hippocrates prescribed honey for:

- Wound healing
- Fever
- Digestive illness

- India
- China
- Middle East
- Multiple African nations

\*Some researchers believe that honey has been used more extensively as a medicine than it has as a food crop.



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# Honey vs Bacteria



• **Pseudomonas Aeruginosa**  
(Germ known to cause infections in burn victims, immunocompromised individuals and cystic fibrosis patients)



**E. coli**

• Research shows honey inhibits:  
• **Staphylococcus aureus**  
( Including MRSA)



# Why Honey Works

...Just where do the antimicrobial properties of honey come from?

## 01. Low Water Content

Most bacteria and fungi need water to grow and reproduce. Properly 'dried' honey will have only 16-18 % water which means very little free water is available for germs to use

## 02. Natural Acidity

Honey typically has a pH between 3.2 or 4.5 making it naturally acidic. Many harmful bacteria grow best near neutral pH which is around 7. The acidic environment, disrupts, bacterial cell function and enzyme activity slowing or stopping their growth.

## 03. Hydrogen Peroxide Release

When honey is diluted slightly, such as when applied to a wound, an enzyme called **glucose oxidize** becomes active. This enzyme slowly converts glucose into hydrogen peroxide, a mild antiseptic. The slow sustained release provide provides continuous antimicrobial activity without damaging surrounding tissue.

## 04. Plant Polyphenols

Honey contains polyphenols and flavonoids, derived from the nectar of plants. These compounds have antioxidant and antimicrobial properties.

[\*Food Chemistry Volume 252\*](#), 30 June 2018, Pages 243-249

## 05. High Osmotic Pressure

Honey is highly concentrated with sugars. This creates strong, osmotic pressure, which pulls water out of bacterial cells through osmosis.



# Medical Honey Today

Hospitals use medical-grade honey for:

- Burns
- Diabetic ulcers
- Surgical wounds
- Pressure sores

Examples:

- Medihoney (New Zealand)
  - Activon (UK)
  - Revamil (Netherlands)
  - Tualang Honey (Malaysia)
  - Sidra Honey (Yemen)
- Different floral sources = different medicinal properties





# Our NATURE ACTION CREWS



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